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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,371

08/23/2006

Alain Michel Le Bail

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22428 7590 12/08/2009
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EXAMINER

KUNEMUND, ROBERT M

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

12/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,371	Applicant(s) LE BAIL, ALAIN MICHEL	
	Examiner Robert M. Kunemund	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,8-13 and 17-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2, 4, 5, 8-13, and 17-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 4, 5, 8 to 13 and 17 to 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/13628 or EP 765 605 both in view of Windhed et al (2005/0049426) and Hartel (6,383,456)

WO 02/13628 A teaches a partial crystallization device comprising a pump (See Fig I(a)i "HHP") for circulating the solution in a circuit of a heat exchanger formed from a tube in contact with a cooling circuit ("STMX"); "STMX" 115; STMX); the three static mixers also constitute a heat exchanger: (See page 13, lines 1--16). The circuit of the exchanger comprises a tube (15) through which the liquid flows and does not include

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any obstacles. Consequently, the device according to WO 02 '618' appears to comprise static means capable of delaying the appearance of crystals. The material to be partially crystallized is then sent to a static mixer that appears capable of suppressing supercooling. The feature "surface condition capable of delaying the appearance of crystals" also seems to be disclosed in document WO 02 '618 (the material flowing through the tube 15, whose internal surface has a more or less "slight" roughness. (See page 12, lines 23-30; Fig. 1(a)) VVO 00/72695 A teaches a partial crystallization device comprising a pump (See Fig. 3 "6") for circulating a solution in a circuit of a heat exchanger (exchanger "4") formed from a tube in contact with a cooling circuit (7). The circuit of the exchange[comprises a tube through which the liquid flows that does not include a static mixer. Consequently, the device according to WO 00 '695 A appears to include static means capable of delaying the appearance of crystals. The material to be partially crystallized is then sent to a static mixer (3) that is capable of suppressing supercooling. (See page 17, paragraph 1 to page 18, paragraph 1; Fig. 3).

EP-A-0-765 605 teaches a partial crystallization method comprising a step that consists of circulating a solution in a circuit (See Fig. 2) of a heat exchanger. (Further See page 8, line 15 and following: "precooler"). The method comprises the steps of: maintaining the temperature below freezing temperature ("undercooled") using static maintenance means (the "precooler" may be considered to be a "static: means); including suppression of the supercooling so as to cause the appearance of the crystallization (ultrasonic treatment")

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The sole difference between the instant claims and the prior art is the means to start crystallization. However, the Windhed et al reference teaches using an obstruction in the path, note fig 6. The Hartel reference teaches using mixers, note col 7. It would have been obvious to one of ordinary skill in the art to modify the W0 02/13628 or EP 765 605 both by Windhed et al (2005/0049426) and Hartel (6,383,456) reference to use mixing means to start the crystallization of the supercooled solutions.

Applicant's arguments with respect to claims 1, 2, 4, 5, and 8 to 13 and 17 to 28 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Kunemund whose telephone number is 571-272-1464. The examiner can normally be reached on 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on 571-272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert M Kunemund
Primary Examiner
Art Unit 1792

RMK

/Robert M Kunemund/
Primary Examiner, Art Unit 1792